Abstract Title Page

Title: Strengthening the research architecture for high quality universal pre-k: development of a quality monitoring tool

Authors and Affiliations: Natalia Rojas, Cybele Raver & Pamela Morris, New York University

Abstract Body

Background / Context:

Senior leaders in New York City (NYC) are currently undertaking arguably one of the most rapidly and broadly deployed educational policy initiatives in the nation by dramatically expanding universal pre-Kindergarten opportunities. Based on decades of research suggesting that early education is key to solving the problem of children's risk of academic failure, NYC leaders in economic development, educational improvement, and early childhood education forged a remarkable political vanguard to offer "Pre-K for All" (PKA). Our own and others' work has suggested that the benefits of UPK delivered at scale can be higher: Analyses from Boston's and Tulsa's UPK programs suggest that children can gain between a half and a full year's worth of learning (or ½ to 1 of a standard deviation (SD) of growth) with the discrepancy between different studies' findings at least partially attributable to UPK quality (Yoshikawa et al., 2013). As President Obama suggested in a recent interview, the problem may be that while we have identified (and can deliver) the key indicators of high quality that are central to children's school readiness, those key components of quality are implemented only "spottily" across the nation (Marron interview, 2015). But senior leaders can benefit from partnerships with academic researchers to learn from research findings and consider how findings from research can inform (or not) implementation on the ground.

Purpose / Objective / Research Question / Focus of Study:

The purpose of this presentation is to describe some of the activities of a partnership forged between NYU researchers and senior leaders in NYC that was intended to provide research infrastructure and capacity-building solutions while also addressing jointly identified research questions about the PKA program. Our focus has been to strengthen the research architecture so that the City can monitor and assess the PKA initiative. But in addition, we have played a key role in providing technical assistance to the city in the roll-out of these early childhood services. As part of that technical assistance, one of our charges was to assist in the development and dissemination of a comprehensive set of quality standards for pre-K across all pre-K sites, as well as the development/refinement of a "snapshot" measure that can be used to assess PKA programs in meeting those standards. We discuss that work in this panel.

There are likely to be major benefits and risks for children entering the expanded PKA program. But one major educational challenge for NYC is that the research architecture by which leaders can quantitatively monitor those potential benefits and risks is only in its earliest stages. In short, our aim is to leverage the successful partnership that has been built over the past year of collaboration between researchers at the Institute of Human Development and Social Change at NYU and NYCs early education policy leaders in the Center for Economic Opportunity (CEO) at the Mayor's office and the Division of Early Childhood Education (DECE) at the Department of Education. The guiding principle for our collaboration is to put "science to work," to jointly strengthen the research tools needed to answer policy and scholarly questions regarding the effectiveness of PKA while also enhancing the usability of those findings for the day-to-day work of practitioners and policymakers.

Setting:

New York City represents the largest school district in the nation, serving 1.1 million students from UPK through 12th grade. As a way to highlight the scale of NYC DOE's student enrollment, it is nearly three times as large as Chicago Public Schools (with an enrollment of 396,000 students) and almost 20 times the size of Boston Public Schools (with an enrollment of 57,000 students; CPS, 2014;BPS, 2015). New York City's students are disproportionately poor, relative to the state and the US as a whole, with 56% of children in New York City living in low-income families (Fass, 2006). Through PKA, the city hired approximately 1,000 new teachers and created approximately 20,000 new pre-k slots in addition to 30,000 existing prekindergarten slots, in order to serve a total of 53,000 children in 2014-2015. By 2016, the City's senior leaders plan to expand services to serve additional 20,000 4-year-olds.

Population / Participants / Subjects:

As discussed above, New York City Department of Education's Preschool for All program (PKA) currently serves over 53,000 4-year-old children in the City's 5 boroughs and which is targeted to serve over 70,000 children by 2016. These children are being served in over 1,000 sites and in approximately 4,000 classrooms. PKA programs are provided through two systems of funding and implementation: Approximately 60% of slots are contracted by NYC DOE to be offered through Community-Based Organizations (CBOs) called New York City Early Childhood Centers (or NYCEECs) and the remainder (approximately 40% of slots) are provided directly by DOE through district schools. Importantly, NYCEECs are held to the same quality standards as district schools, are integrated across data platforms for such areas as child enrollment and screening, and where all of the districts' directors of ECE report to the DOE's central Division of Early Childhood Education.

Intervention / Program / Practice:

Our work builds on the past 18 months of our intensive collaboration with the New York City Department of Education and the Mayor's office. In the course of that collaboration, our team has provided extensive technical assistance to support city leaders' needs to offer the highest quality pre-k services to low-income children throughout the city. During this past year, we have worked collaboratively with these city agencies to identify challenges; build data systems and infrastructure; add expertise regarding developmental and contextual assessment; and together implement data-based solutions to the inevitable challenges that have accompanied New York City's historic expansion of prekindergarten access.

Research Design:

To support the development of PKA standards, we completed extensive review and revision of existing standards to ensure that a) standards were aligned with the most up-to-date scholarly research on the key classroom- and program-level factors that are most likely to support young children's early learning and development in UPK settings. In addition, we completed extensive review and revision to ensure b) that standards were aligned and streamlined across multiple systems of accountability and oversight. This alignment is particularly important so that PKA standards are consistent with the expectations and benchmarks expressed through other relevant

regulatory systems (see Rizzo & Sindelar, 1994 for discussion of the difficulties of ensuring high quality services in conditions of misaligned standards). Finally, we placed a high premium on c) brevity and cohesion of standards – we kept in mind a hypothetical provider of UPK services who would be able to use these standards as helpful guidelines, and who could devote the bulk of their resources to providing the highest quality educational experiences to young children rather than to the process of navigating complex, lengthy, or unclear regulations.

Data Collection and Analysis:

Two teams of doctoral level staff reviewed and content-coded existing PKA standards against extant research literatures, highlighting areas that were highly, partially, or not supported by empirical evidence. The two teams then content-coded all existing PKA standards against 7 sets of standards, including DOE's K-12 quality standards (Framework for Great Schools, Quality Review, Danielson Framework), Head Start standards, State UPK standards, and QRIS standards. Given that our objective is to empirically identify areas where programs are doing well in meeting those standards versus where programs have room to make improvements (i.e. areas where programs are less strong or fall short), we also included comparison of PQS standards against two rigorously validated and nationally recognized assessments of quality, the ECERS and the CLASS.

As a result of our initial findings, PKA standards were revised to fill gaps and to underscore existing strengths. Multiple drafts of revised standards were reviewed by the NYU team and DOE team for clarity, consistency, and accuracy. A final draft was prepared for review and approval by senior leaders in DOE and other related Offices.

The next step will be to refine measures of PKA quality measurement. DECE has three primary uses for program quality information; to inform technical assistance efforts, to make accountability decisions, and to share information with the public. Beginning in the 2015-2016 school year, DECE will begin the collection of data to meet these needs. We have begun analyzing these data to develop a "snapshot" rubric for use by the city in these efforts. This will include review other pre-K data collection tools that have validly collected information for a "snapshot" of pre-K quality for formative purposes. As a result of that review, we will provide recommendations for how to collect data for the "snapshot" in ways that support district-wide use of data for quality monitoring and quality improvement. This work will also be presented as part of our panel presentation.

Findings / Results:

Our approach to developing the PKA standards revealed several strengths in the prior set of standards, including PKA standards' high valuation of both the instructional and emotional components of classroom quality; the importance of high levels of communication between teachers, students and families; the value of child-level assessment in tailoring instruction to meet young learners' needs, as examples. Our review also revealed important gaps in prior versions of PKA standards, including under-emphasis on classroom-level assessment and the use of data for quality improvement; under-emphasis on instructional quality as rigorous and

supportive of all students' learning; and under-emphasis on the value of collaboration among teachers in an effort to assure high quality instruction, as we describe below:

- The revised PKA standards now reflect a balance between "developmentally appropriate practice (DAP)" and "rigorous, cognitively challenging instruction and curricula." In past decades, researchers have rightly pointed out the importance of DAP for children's growth and learning, including the importance of structuring opportunities for play, exploration, and children's early positive social engagement with peers and teachers. More recently, results from a range of preschool interventions and UPK evaluations suggests that curricula focusing on a range of different content domains (such as math, dialogic reading, science, or social skills) can help teachers to structure more rigorous, engaging and extended opportunities for children's language, reasoning, and social skills. The revised PKA standards now reflect this balance.
- The revised PKA standards continue to reflect the importance of child assessment and the use of assessment data to tailor instruction to meet the needs of individual learners. In light of a large body of recent research on the importance of measuring and improving the "process" features of classroom quality (such as instructional quality and emotional support), these PKA standards needed to be expanded. The revised PKA standards now provide complementary emphasis on the value of classroom-based assessment, the need to review and strengthen classroom instructional practices in light of assessment, and the value of improving classroom instructional practices through collaboration with other teachers as well as other forms of PD.
- PKA standards were also revised to include greater roles for program leadership in supporting classroom quality and quality improvement. These revised PKA standards are now well-aligned with K-12 standards (e.g. Framework for Great Schools) so that the same graphic representation of "what it takes" to provide a great program are consistent across PKA and K-12 platforms.

As we discussed above, we have begun analyzing data collected by the DECE to address the second goal of our TA effort—to develop a snapshot rubric for assessing quality of PKA as it is delivered to more than 50,000 children in NYC.

Conclusions:

Our primary goal in this partnership is to address a core educational challenge: that the translation of social science from research to practice is often simply too slow and cumbersome to benefit leaders in large urban educational systems (Easton, 2014; Raver, 2013). By helping NYC leaders to offer PKA services that build off of the strongest research evidence, we aim to set the stage for continued long-term collaboration between CEO, the DECE, and researchers in early childhood education and policy at NYU.

Appendices

Appendix A. References

- Boston Public Schools (2015). Facts, Figures and Reports. Retrieved from http://www.bostonpublicschools.org/domain/238.
- Chicago Public Schools (2015). Stats and Facts. Retrieved from http://cps.edu/About_CPS/At-a-glance/Pages/Stats_and_facts.aspx
- Easton, J.Q. (2014, April). *IES: Promises and Challenges*. Presentation at the Annual meeting of the American Educational Research Association, Philadelphia, PA. Retrieved from http://ies.ed.gov/director/pdf/Easton040514.pdf
- Fass, S. (2006). Two Out of Every Five Children in New York Live in Low-Income Families. National Center for Children in Poverty. Retrieved from http://www.nccp.org/media/releases/release_12.html
- Maron, M. (Host). (2015, June 22,). *WTF with Marc Maron* [Audio podcast]. Retrieved from http://www.wtfpod.com/podcast/episodes/episode_613_-_president_barack_obama
- Raver, C. C. (2013, September). *Targeting self-regulation through intervention: Lessons from RCTs*. Invited address, Society for Research in Educational Effectiveness, Washington DC.
- Rizzo, J. A., & Sindelar, J. L. (1994). *Optimal regulation of multiply-regulated industries: The case of physician services* (No. w4822). National Bureau of Economic Research.
- Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, W., . . Zaslow, M. J. (2013). *Investing in our future: The evidence base on preschool education*. New York, NY: Foundation for Child Development, Society for Research in Child Development.